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HOGAN & HARTSON LLP IP GROUP, COLUMBIA SQUARE 555 THIRTEENTH STREET, N.W.		EXAMINER		
			HECK, MIC	HECK, MICHAEL C
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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Addien Summan	10/005,759	MILLER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael Heck	3623				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 14.	<i>July</i> 2003 .					
2a)⊠ This action is FINAL . 2b)□ Th	is action is non-final.					
3) Since this application is in condition for allows closed in accordance with the practice under Disposition of Claims	ance except for formal matters, pr Ex parte Quayle, 1935 C.D. 11, 4	rosecution as to the merits is . 153 O.G. 213.				
4)⊠ Claim(s) <u>51-71</u> is/are pending in the application	nn					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>51-71</u> is/are rejected.						
7) Claim(s) is/are objected to.		•				
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers	·					
9)☐ The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) acce	pted or b)⊡ objected to by the Exa	miner.				
Applicant may not request that any objection to th						
11)⊠ The proposed drawing correction filed on <u>14 Ju</u>	<u>ıly 2003</u> is: a)⊠ approved b)□ d	isapproved by the Examiner.				
If approved, corrected drawings are required in re						
12)☐ The oath or declaration is objected to by the Ex	caminer.	,				
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
a)☐ All b)☐ Some * c)☐ None of:						
1. Certified copies of the priority document	ts have been received.					
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the prior application from the International But * See the attached detailed Office action for a list 	ıreau (PCT Rule 17.2(a)).					
14) Acknowledgment is made of a claim for domest	ic priority under 35 U.S.C. § 119(e) (to a provisional application).				
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domest 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
S. Patent and Trademark Office						

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DETAILED ACTION

This Final Office Action is responsive to applicant's amendment filed 14 July 2003. 1. Applicant's amendment of 14 July 2003 canceled claims 1-50 and added claims 51-71. Currently, claims 51-71 are pending.

Response to Amendment

- The objection to the drawings in the First Office Action is withdrawn in response to the 2. applicant's amendment to the drawings.
- The objection to the abstract in the First Office Action is withdrawn in response to the 3. applicant's amendment to the abstract.
- The objection to the specification in the First Office Action is withdrawn in response to 4. the applicant's amendment to the specification.
- The objection to the claims in the First Office Action is withdrawn in response to the 5. applicant's cancellation of the claims.
- The 35 USC 112 first paragraph rejection in the First Office Action for claims 1-44 are 6. withdrawn in response to the applicant's cancellation if the claims.

Response to Arguments

Applicant's arguments with respect to claims 1-50 have been considered but are moot in 7. view of the new grounds of rejection. Examiner notes that applicant cancelled claims 1-50 and added claims 51-71. Applicant acknowledges that some of the steps of the invention are well known in the field of process engineering and may be adapted as needed for the product and

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industry of application. The applicant also asserts the present invention provides a time and cost efficient manner for implementing these steps and integrates these steps into a commercially viable process for developing a new product. Applicant believes that Bowman-Amuah (U.S. Patent 6,256,773) does not qualify under 35 USC 102(e) as a patent filed "by another" since Bowman-Amuah is assigned to Accenture LLP and the present application is assigned to Accenture Global Services GmbH, a wholly owned subsidiary of Accenture LLP. Bowman-Amuah qualifies under 35 USC 102(a) since the patent authored by a different applicant than the applicant of the present application was published prior to the filing date of the present application.

Also, the applicant has drafted and invoked 35 USC 112, 6th paragraph (means or step plus function language), for claim 51 and its dependent claims and associated claims 69-71. The applicant argues that the particular set of actions undertaken in the present invention to accomplish the function of organizational management, as described in FIGS. 2A-3D and the supporting text in the specification, is not present in Major et al. (Major et al., Meeting the Software Challenge: Strategy for Competitive Success, Research Technology Management, Vol. 41, issue 1, Jan/Feb 1998, Pages 48-56 [PROQUEST]). The applicant gives the example that Major et al. does not teach or suggest any steps of a Product Improvement Process to create and maintain a Software Engineering Process Group (SEPG). For clarification the applicant uses the Software Engineering Process Group to refer to a group overseeing software and non-software processes (Specification, Page 7). Major et al. refers to Motorola's Software Engineering Technology Steering Committee as the organization that recommended to the office of the CEO that the company embrace as a goal that all organizations achieve a maturity level of 3 in the

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non-software processes.

CMM. The company started to recognize the importance of software and as a result created the Senior Executive Program (SEP) for Software where the participants were expected as challenged by the CEO to make software a critical focus in Motorola to not only learn about software, but to make significant changes occur in the company (Page 51). The examiner believes the SEP for Software meets the applicant's criteria of a group overseeing software and

MPEP 2111.01 indicates that when 35 USC 112, 6th paragraph, is invoked the specification must be consulted to determine the structure, material, or act corresponding to the function recited in the claim. In re Donaldson, 16 F.3d 1189, 29 USPQ2d 1845 (Fed Cir. 1994). The examiner has reviewed the specification to determine the structure, material or acts corresponding to the function recited in the claim. However, MPEP 2111.01 also states when addressing 35 USC 112, 6th paragraph, that limitations, not present in the claims, cannot be imported from the specification. Specifically, the examiner is not allowed to read additional limitation from the specification into the claims. Therefore, the examiner has not read into the claims the specific steps of FIGS 2A-3D.

The applicant's new claims 51-71 are addressed below.

Claim Objections

8. Claims 62-64 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. Claims 62-64 do not claim any limiting subject matter.

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Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 53, 55, 57, 58, and 66-67 are rejected under 35 U.S.C. 112, second paragraph, as

being incomplete for omitting essential structural cooperative relationships of elements, such

omission amounting to a gap between the necessary structural connections. See MPEP

§ 2172.01. The omitted structural cooperative relationship is the listing of the sequential

occurrence of the claimed steps. The claims recite the steps and indicate the steps are performed

sequentially, but fail to indicate in which order they are to be performed. For examination

purposes, the examiner interprets the sequence to be the order in which they are listed.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 51-68 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

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For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, claims 51 and 66 only recite an abstract idea. As to claim 51, the recited method comprising a step for managing an organization developing said product, said step for managing an organizational comprising a step for managing personnel of said organization, and a step for implementing a product improvement process as needed to create and maintain a Software Engineering Process Group (SEPG); a step for managing a project for development of said product; and a step for managing delivery of said product, whereby the step for managing the organization, the step for managing project development, and the step for managing delivery occur concurrently, whereby results from the step for managing the organization are used to modify the step for managing project development and the step for managing delivery, and whereby results from the step for managing project development and results from the step for managing delivery are used to modify the step for managing the organization does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. As to claim 66, the recited method comprising managing an organization developing said product, said managing of the organizational comprising managing personnel of said organization and implementing a product improvement process performed in parallel, the managing the personnel

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of the said organization comprising sequentially performed steps of designing a performance measurement infrastructure, executing organization design and development, and designing and deploying training, and the implementing of a product improvement process comprising parallel steps of planning and organizing a Software Engineering Process Group (SEPG) and managing and improving the organization's processes, the managing and improving the organization's processes comprising sequentially performed steps of controlling SEPG project work, rolling out and supporting SEPG projects, completing the SEPG project, and controlling process improvement; managing a project for development of said product, wherein said project managing includes the sequentially performed steps of planning of execution of the project, organizing project resources, control project work; completion of the project; and managing delivery of said product, the managing of product delivery comprising the sequential steps of product analysis, product design, product building and testing, and product deployment, whereby the step of managing the organization, the step for managing development; and the step for managing delivery are performed concurrently does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use The methods only constitute an idea for a process for accelerating of a pencil and paper. improvement to a product.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implications of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to

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anything in the technological arts as explained above. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces a process (i.e., repeatable) for accelerating improvement to a product (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 51 and 66 are deemed to be directed to non-statutory subject matter.

Claims 52-65 and 67-68 are rejected for being dependent upon claims 51 and 66.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 13. Claims 51-59, and 66-71 are rejected under 35 U.S.C. 102(b) as being anticipated by McFeeley (McFeeley, IDEALsm: A User's Guide for Software Process Improvement, Software Engineering Institute, Carnegie Melon University, Pittsburgh, Pennsylvania, February 1996, [GOOGLE]). McFeeley discloses a accelerated process improvement framework comprising:
 - [Claim 51] a) a step for managing an organization developing said product, said step for managing an organizational comprising a step for managing personnel of said organization, and a step for implementing a product improvement process as needed to create and maintain a Software Engineering Process Group (SEPG) (Page 1-4, 17-

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31 and Appendix A.0 and A.2, McFeeley teaches a model where the initial phase has management organizing a discovery team to put together a proposal to management for launching a Software Process Improvement program. The team identifies and understands the key business needs driving the requirement for an improvement program, builds a proposal for senior management that will explain the program, why it should be initiated, and how to implement the program, and educates and builds support for the program. Once approved the software process improvement infrastructure is established which included the Software Engineering Process Group (SEPG). The step for managing personnel involves the organization executing the sequence of recommended steps for software process improvement that include the process for establishing the software process improvement infrastructure, the metrics necessary to monitor progress, and leveraging knowledge learned for the next pass through the model.);

- b) a step for managing a project for development of said product (Page viii and 1, McFeeley teaches the objective of the document is to communicate a path of actions that constitute a Software Process Improvement (SPI) initiative. An organization will tailor the steps to fit its resources, vision, and business objectives. The document provides a generic description of a sequence of recommended steps for SPI); and
- c) a step for managing delivery of said product, whereby the step for managing the organization, the step for managing project development; and the step for managing delivery occur concurrently whereby results from the step for managing the organization are used to modify the step for managing project development and the step for managing delivery, and whereby results from the step for managing project development and results from the step for managing delivery are used to modify the step for managing the organization (Page 1-4, McFeeley teaches the IDEAL model depicts five phases of the SPI initiative, which provides a continuous loop through the steps necessary for Software Process Improvement (SPI). Organizations will find many activities that can be pursued in a parallel fashion. The model builds on itself in that solutions that have been developed, lessons learned, and metrics collected are added to the process database that will become the source of information for the next pass through the model).
- [Claim 52] a step for managing a program for implementing said step for managing the organization, said step for managing development of said product; and said step for managing delivery of said product (Page 5, McFeeley teaches a strategic and tactical component of applying the IDEAL model. The strategic level is the responsibility of senior management and the tactical level is where processes are modified, created and executed by line managers and practitioners.).
- [Claim 53] a steps for justifying the program; a steps for planning execution of the program; a steps for organizing program resources; a steps for controlling program work; and a steps for completing the program, whereby said steps for justifying the program; planning execution of the program; organizing program resources; controlling program work; and completing the program are performed sequentially

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(Pages 1-10, McFeeley teaches the initial phase is where the improvement infrastructure is established. Approval for the SPI initiative is obtained, general goals are defined, and initial infrastructure is established to include the establishment of the management steering group (MSG) and the software engineering process group (SEPG). The establishing phase addresses prioritizes and strategies for pursuing solutions to include an action plan. Measurable goals are developed as well as metrics to monitor progress. During the acting phase solutions are created, piloted, and deployed throughout the organization.).

- [Claim 54] a step for managing personnel of said organization and a step for implementing a product improvement process performed in parallel (Pages 1-10, McFeeley teaches that during the establishing phase that resources are committed and training provided for the technical working groups (TWGs). The IDEAL model depicts five phases of the SPI initiative, which provides a continuous loop through the steps necessary for Software Process Improvement (SPI). Organizations will find many activities that can be pursued in a parallel fashion.)
- [Claim 55] a step for designing a performance measurement infrastructure, a step for executing organization design and development, and a step for designing and deploying training, whereby the steps of designing a performance measurement infrastructure, executing organization design and development, and designing and deploying training are performed sequentially (Pages 1-4, McFeeley teaches the initial phase is where the initial infrastructure to support and facilitate SPI will be established. The establishing phase addresses prioritizes and strategies for pursuing solutions to include an action plan. Measurable goals are developed as well as metrics to monitor progress. During the next phase or acting phase, solutions are created, piloted, and deployed throughout the organization. Plans to accomplish the roll-out are then developed and executed. The examiner interprets plans to include training.).
- [Claim 56] (i) a step for planning and organizing the Software Engineering Process Group (SEPG) (Page 11, McFeeley teaches during the initial phase the organization decides how it will organize its improvement process. Based on these initial decisions, the charter and staffing for the management steering group (MSG), software engineering process group (SEPG), and other organizational entities are completed), and
- (ii) a step for managing and improving the organization's processes, the step of managing and improving the organization's processes comprising controlling SEPG project work, rolling out and supporting SEPG projects, completing the SEPG project, and controlling process improvement (Page 147, McFeeley teaches the role of the SEPG is that of a facilitator, helping guide the process improvement process activity. The SEPG helps projects with their difficulties as they implement process improvement.).
- [Claim 57] a step for planning of execution of the project; a step for organizing project resources; a step for controlling project work; and a step for completing the

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project, whereby the steps for planning of execution of the project, organizing project resources, control project work; completion of the project are sequentially performed (Pages 172-175, McFeeley teaches the SEPG is responsible for and facilitates the activities that relate to SPI, such as action planning, process improvement, technology innovation, and other activities. The SEPG supports the line managers and development projects by providing consultation, and guidance and support when new processes are being introduced. The tasks of the SEPG include identifying and recommending improvement activities to the MSG, tracking and reporting progress of improvements to the MSG, determine effectiveness of the improvements, and develop and maintain the process database.).

- [Claim 58] a step for analyzing the product, a step for designing the product, a step for building and testing the product, and a step for deploying the product, whereby the steps for analyzing the product, product design, product building and testing, and product deployment are performed sequentially (Page 176-178, McFeeley teaches the technical working group (TWG) assesses and improves the current processes by researching the problem and identifying solutions, revise the tactical action plan to fit the selected solution, prototype the selected solution, evaluate results of the prototype, and revise the tactical action plan with the lessons learned form the prototype. The TWGs are the solution developers with the responsibility to address a specific area for process improvement. They are given a charter, resources, and authority to complete their activity.).
- [Claim 59] a step for defining a business case; a step for gathering and analyzing requirements; a step for assessing deployment environment; and a step for identifying and analyzing application and interface requirement (Pages 176-178, McFeeley teaches the objectives of the TWG are to document, assess, and improve current processes, develop a plan to pilot the improved process, and pilot the improved process).
- [Claim 66] a) managing an organization developing said product, said managing of the organizational comprising managing personnel of said organization and implementing a product improvement process performed in parallel, the managing the personnel of the said organization comprising sequentially performed steps of designing a performance measurement infrastructure, executing organization design and development, and designing and deploying training, and the implementing of a product improvement process comprising parallel steps of (i) planning and organizing a Software Engineering Process Group (SEPG) and (ii) managing and improving the organization's processes comprising sequentially performed steps of controlling SEPG project work, rolling out and supporting SEPG projects, completing the SEPG project, and controlling process improvement (Page 1-4, 17-31 and Appendix A.0 and A.2, McFeeley teaches a model where the initial phase has management organizing a discovery team to put together a proposal to management for launching a Software Process Improvement program. The team identifies and understands the key business needs driving the

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requirement for an improvement program, builds a proposal for senior management that will explain the program, why it should be initiated, and how to implement the program, and educates and builds support for the program. Once approved the software process improvement infrastructure is established which included the Software Engineering Process Group (SEPG). The step for managing personnel involves the organization executing the sequence of recommended steps for software process improvement that include the process for establishing the software process improvement infrastructure, the metrics necessary to monitor progress, and leveraging knowledge learned for the next pass through the model.);

- b) managing a project for development of said product, wherein said project managing includes the sequentially performed steps of planning of execution of the project, organizing project resources, control project work, completion of the project (Page viii and 1, McFeeley teaches the objective of the document is to communicate a path of actions that constitute a Software Process Improvement (SPI) initiative. An organization will tailor the steps to fit its resources, vision, and business objectives. The document provides a generic description of a sequence of recommended steps for SPI); and
- c) managing delivery of said product, the managing of product delivery comprising the sequential steps of product analysis, product design, product building and testing, and product deployment, whereby the step of managing the organization, the step for managing development; and the step for managing delivery are performed concurrently (Page 1-4, McFeeley teaches the IDEAL model depicts five phases of the SPI initiative, which provides a continuous loop through the steps necessary for Software Process Improvement (SPI). Organizations will find many activities that can be pursued in a parallel fashion. The model builds on itself in that solutions that have been developed, lessons learned, and metrics collected are added to the process database that will become the source of information for the next pass through the model).
- [Claim 67] managing a program for implementing said steps of managing the organization, managing development of said product; and managing delivery of said product, wherein said step of managing a implementation program comprises the sequentially performed steps of justifying the program; planning execution of the program; organizing program resources; controlling program work; and completing the program (Page 1-10, McFeeley teaches a strategic and tactical component of applying the IDEAL model. The strategic level is the responsibility of senior management and the tactical level is where processes are modified, created and executed by line managers and practitioners. The initial phase is where the improvement infrastructure is established. Approval for the SPI initiative is obtained, general goals are defined, and initial infrastructure is established to include the establishment of the management steering group (MSG) and the software engineering process group (SEPG). The establishing phase addresses prioritizes and strategies for

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pursuing solutions to include an action plan. Measurable goals are developed as well as metrics to monitor progress. During the acting phase solutions are created, piloted, and deployed throughout the organization.).

[Claim 68] sequentially performed steps of: analyzing the product; designing the product, building and testing the product, and deploying the product sequentially (Page 176-178, McFeeley teaches the technical working group (TWG) assesses and improves the current processes by researching the problem and identifying solutions, revise the tactical action plan to fit the selected solution, prototype the selected solution, evaluate results of the prototype, and revise the tactical action plan with the lessons learned form the prototype. The TWGs are the solution developers with the responsibility to address a specific area for process improvement. They are given a charter, resources, and authority to complete their activity.)

Claims 69-71 recite substantially the same limitations as that of claims 66-68 with the distinction of the recited process being a program storage device. Hence, the same rejection for claims 66-68 as applied above applies to claims 69-71.

Allowable Subject Matter

14. Claims 60, 61, and 65 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Heck whose telephone number is (703) 305-8215. The examiner can normally be reached Monday thru Friday between the hours of 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

Commissioner of Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Or faxed to:

(703) 872-9306

[Official communications; including After Final communications

labeled "Box AF"]

(703) 746-9419

[Informal/Draft communication, labeled "PROPOSED" or

"DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, Virginia, 7th floor receptionist.

mch

15 September 2003

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3600